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(54) [Title of the Invention]

PAPER DIAPER PACKAGE AND A METHOD FOR MANUFACTURING THE
SAME

(57) [Abstract]

[Purpose] To obtain a paper diaper package compactly packaged.

[STRUCTURE] A large number of paper diapers 1 are stored in a nylon bag 2 wherein a layer of polyethylene is formed on the inner surface. Air 4 in bag 2 is evacuated by a vacuum pump to reduce the capacity of the bag and paper diapers 1, thereby compressing the paper diapers. A bag opening 3 is pinched by a heated sealing bar so that bag opening 3 is welded and sealed off thereby obtaining a paper diaper pack.

[What is Claimed]

[Claim 1]

A method for manufacturing a package for paper diapers, wherein said paper diapers are stored in an airtight bag, the air inside said bag is evacuated to decrease the volume of said bag and paper diapers, so that said paper diapers are compressed, and then that the opening of said bag is sealed off.

[Claim 2]

A package for paper diapers, characterized in that paper diapers are stored after being compressed inside an airtight bag.

[Detailed Description of the Invention]

[0001]

[Field of the Invention]

The present invention relates to a paper diaper package which is compactly packaged and a method for manufacturing the same.

[0002]

[Description of the Prior Art]

Conventionally, since diapers need to be changed many times a day, paper diapers are useful because of the convenience of disposability. Also, as the society ages, more attention has been paid to paper diapers. Furthermore, since paper diapers are used with high frequency, they are packaged in a bag a dozen each to a bag.

[0003]

[Problems to be Solved by the Invention]

However, since a paper diaper structurally contains a lot of air inside, it makes up a large percentage of the space compared to its weight. Therefore, it is inconvenient to carry paper diapers and a large space is necessary to store them. Also, their shipping cost is high.

[0004]

In order to solve the above described problems, the present invention aims at providing a paper diaper package which is compactly packaged and the method for manufacturing the same.

[0005]

[Means to Solve the Problems]

In order to achieve the above described purposes, the paper diaper package of the present invention has a structure wherein compressed paper diapers 1 are stored in an airtight bag 2 (see Figure 1).

[0006]

Also, the method for manufacturing the paper diaper package of the present invention has a structure wherein paper diapers 1 are stored in airtight bag 2, air 4 inside bag 2 is evacuated to decrease the volume of bag 2 and paper diapers 1 so that paper diapers are compressed, and then opening 3 of bag 2 is sealed.

[0007]

Since air inside bag 2 is evacuated so that the inside of bag 2 is depressurized, it is required that bag 2 is airtight. An example of material having the airtightness property is nylon. Also, when bag opening 3 is welded and sealed off or bag 2 is made from two welded films, the airtight material creates a layer on the underside surface, which is made of materials such as non-oriented polypropylene and polyethylene, which are easily welded by heat. Furthermore, when bag 2 has printed patterns, the airtight material creates a layer on the first surface,

which is made of materials such as polyethylenephthalate and non-oriented polypropylene, which have good printability.

[0008]

Paper diapers are stored in the above described bag 2 depending on a variety of uses. For example, when the paper diaper package is used at home, paper diapers 1 are stored in bag 2 one by one. When the paper diaper package is used in hospitals, paper diapers 1 are stored in bag 2 by multiple pieces. This is because a great number of paper diapers 1 are used at the time of opening the paper diaper package.

[0009]

Air 4 inside bag 2 containing paper diapers 1 is evacuated by a vacuum pump to reduce the capacity of bag 2 and paper diapers 1 (see Figure 2). Here, the volume of air 4 which is evacuated from bag 2 and the time when air 4 is evacuated may be determined depending on the size of the paper diaper package. Also, the compression ability of paper diapers 1 is preferably 50% or lower than pre-packaged paper diapers 1. Here, since paper diapers 1 return to the pre-packaged state some time after the paper diaper package is opened, there is no problem for using paper diapers 1.

[0010]

An example of commonly-used methods for sealing off bag opening 3 is a heat-sealing method wherein the films are welded by pinching the vicinity of bag opening 3 with a heated sealing bar.

[0011]

Furthermore, as shown in Figure 3, it is possible to create a series of bags 2 so that the paper diaper package does not fall apart, or to perforate the boundary lines of bags 2 so that bags 2 can be easily separated from each other.

[0012]

[Effects of the Invention]

The paper diaper package of the present invention has a structure wherein compressed paper diapers are stored in an airtight bag.

[0013]

Therefore, the paper diaper package can be stored in a small space. Also, the shipping cost of the paper diaper packages is brought down.

[0014]

Furthermore, the method for manufacturing the paper diaper package has a structure wherein the paper diapers are stored in an airtight bag, the air inside the bag is evacuated to decrease

the capacity of the bag and the paper diapers so that the paper diapers are compressed, and then the bag opening is sealed.

[0015]

Therefore, the paper diapers can be compactly packaged.

[Brief Description of the Drawings]

[Figure 1]

Figure 1 is a cross-sectional view illustrating an embodiment of the paper diaper package of the present invention.

[Figure 2]

Figure 2 is a cross-sectional view illustrating an embodiment of the method for manufacturing the paper diaper package of the present invention.

[Figure 3]

Figure 3 is a perspective view illustrating another embodiment of the paper diaper package of the present invention.

[Explanation of the Symbols]

1 ... Paper diaper

2 ... bag

3 ... bag opening

4 ... air

[Figure 1]

[Figure 2]

[Figure 3]